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09/973,320	10/09/2001	Niall R. Lynam	DON04 P-945	2222

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EXAMINER

LESTER, EVELYN A

ART UNIT PAPER NUMBER

2873

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/973,320

Applicant(s)

LYNAM, NIAL R.

Examiner

Evelyn A. Lester

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 76-142, 166, 173, 215, 240, 247, 285, 313 and 320 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 76-142, 166, 173, 215, 240, 247, 285, 313 and 320 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 7. 6) ☐ Other: \_\_\_\_\_

Continuation of Disposition of Claims: Claims withdrawn from consideration are 143-165,167-172,174-214,216-239,241-246,248-284,286-312,314-319 and 321-357.

**DETAILED ACTION**

***Multiplicity Rejection***

1. In the office action, mailed on June 24, 2003, a multiplicity rejection was made on claims 76-357, wherein the Applicant was requested to select only 75 claims to be examined on the merits, for reasons stated in that office action. The Applicant's response, filed on September 9, 2002, selected the following 75 claims: including claims 76-141, 142, 166, 173, 215, 240, 247, 285, 313 and 320. These claims are hereby examined, and the remaining 208 claims, including claims 143-165, 167-172, 174-214, 216-239, 241-246, 248-284, 286-312, 314-319 and 321-357, are hereby withdrawn from consideration.

2. The Applicant's traverse of this rejection has been considered, but is not found to be persuasive. The Examiner disagrees with the Applicant's arguments that there is no burden on the Examiner to examine the 283 new claims.

As the Applicant points out in their traverse, the series of claims are similar to one another, which is to say that the claims do not "differ substantially from each other" as required by 37 CFR 1.75(b). Further required by 37 CFR 1.75(b) is that the claims are not unduly multiplied. This application has 283 claims, which do not substantially differ from one another, which is clear evidence that the claims are unduly multiplied. It is also noted that this application is an eleventh generation case, wherein 9 of the previous 10 applications issued. Collectively, the 9 patents have a total of 438 claims.

The only application not to issue was the original application, serial number 07/155,256, which was filed with only 52 claims.

The degree of repetition and multiplicity this case presents is evident in the sheer number of claims and the number of generations of applications filed. It is quite confusing that the Applicant's invention should take 438 claims to define, and then require an additional 283 claims to define it. And if all of these claims are required to define their invention, and they are supposedly substantially different, it is interesting that an obviousness-type double patenting has been applied to the last 5 applications, as well as this application. Due to the extensive repetition and multiplicity of claims, the net result can not help but be confusion, and further presents an unreasonable burden on the Examiner.

With respect to the significantly large filing fee, no amount of fees, however large, will buy an Applicant around the rules governing the examination process.

***Claim Rejections - 35 USC § 112, First Paragraph***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 76-90, 95-142, 166, 173, 215, 240, 247, 285, 313 and 320 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling.

Means for applying an electric field necessary for the proper operation and functioning

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of the invention, such as conductors or electrodes, are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

The claimed invention can not function without an electric field applied to the variable transmission medium, and there is no disclosure for applying the electric field except through transparent conductors or electrodes. Without a means for applying the electric field to the variable transmission medium, the claimed invention is incomplete and not enabled by the disclosure.

***Claim Rejections - 35 USC § 112, Second Paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 76-90, 95-142, 166, 173, 215, 240, 247, 285, 313 and 320 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: transparent conductors or electrodes. Note the above rejection.

***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

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F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 76-100, 105-109, 112-114, 117-120, 126, 130, 131, 140, 141, 142, 166, 173, 285, 313 and 320 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-64 of U.S. Patent No. 5,115,346. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application claimed invention is an obvious variation of the patent claimed invention.

The claimed inventions are interpreted as reading on each other as delineated below:

Application Claimed Invention:	Patent Claimed Invention:
<p>Claim 76-</p> <p>at least first and second spaced optically transparent panels, Each panels having a front surface and an opposing rear surface and defining a space;</p> <p>a variable transmission medium disposed in the space, whose light transmittance is variable upon the application of an electric field;</p>	<p>Claim 1-</p> <p>first and second spaced, optically transparent elements, each element having front and rear surfaces and defining a space;</p> <p>an electro-optic medium confined in the space, whose light transmittance is variable upon application of an electric field;</p>

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<p>ultraviolet radiation reducing means, comprising at least one of an ultraviolet absorber, an ultraviolet absorbing polymer and an ultraviolet absorbing glass;</p> <p>safety means incorporated in the assembly for preventing injury upon impact to the assembly, comprising at least one of a laminated glass panel, a tempered glass panel and a polymeric layer.</p>	<p>ultraviolet radiation reducing means</p> <p>Claim 2- the first element is a laminate assembly including a pair of optically transparent panels secured to one another by an intermediate layer,</p> <p>Claim 3- at least one of the panels is formed from highly light transmitting glass and includes the ultraviolet radiation reducing means,</p> <p>Claim 4- wherein the glass panel includes the spectrally selective absorbing means, the glass panel being formed from specialized glass which absorbs more visible light in wavelengths higher than about 550 nm,</p> <p>Claim 5- wherein the ultraviolet radiation reducing means and the spectrally selective absorbing means include the intermediate layer which is a polymeric interlayer which adheres the panels together,</p> <p>Claims 15 or 34- at least one of the glass panels is formed from tempered safety glass.</p>
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Though the Applicant has claimed the "safety means" in the application claimed invention with a purpose of preventing injury, this does not render the claimed invention patentable over the patent claimed invention. This advantage would flow naturally from the claimed elements from the patent claimed invention because of the inclusion of



"safety glass" and the polymeric interlayer. Otherwise, the patent claimed invention anticipates the application claimed invention. For the purpose of brevity, only one claim has been compared to the patent claimed invention.

7. Claims 75-90 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14-27 and 30-74 of U.S. Patent No. 5,239,406. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application claimed invention is an obvious variation of the patent claimed invention.

The claimed inventions are interpreted as reading on each other as delineated below:

Application Claimed Invention:	Patent Claimed Invention:
<p>Claim 76-</p> <p>at least first and second spaced optically transparent panels, Each panels having a front surface and an opposing rear surface and defining a space;</p> <p>a variable transmission medium disposed in the space, whose light transmittance is variable upon the application of an electric field;</p> <p>ultraviolet radiation reducing means, comprising at least one of an ultraviolet absorber, an ultraviolet absorbing polymer and an ultraviolet absorbing glass;</p> <p>safety means incorporated in the assembly</p>	<p>Claim 14-</p> <p>first and second spaced, optically transparent elements, each element being adjacent to one another and having facing surfaces and defining a space;</p> <p>an electrochromic medium confined in the space, whose light transmittance is variable upon application of an electric field;</p> <p>ultraviolet radiation reducing means</p> <p>the glazing assembly adapted to be</p>

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for preventing injury upon impact to the assembly, comprising at least one of a laminated glass panel, a tempered glass panel and a polymeric layer.	mounted in a vehicle having an exterior, the second element being a laminate assembly adapted to be closer to the exterior of the vehicle in which the assembly is mounted and including first and second, spaced optically transparent panels, the panels having facing surfaces secured to one another by an intermediate layer;  Claim 18- The intermediate layer comprises an optically transparent polymeric adhesive substance having spectrally selective absorbing characteristics; the ultraviolet radiation reducing means being incorporated therein, the polymeric adhesive substance providing scatter proofing characteristics.
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Therefore, the patent claimed invention anticipates the application claimed invention.

For the purpose of brevity, only one claim has been compared to the patent claimed invention.

8. Claims 76, 100-105 and 130-140 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 32 of U.S. Patent No. 5,355,245. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application claimed invention is an obvious variation of the patent claimed invention.

The obvious variation of the patent claimed invention is that the variable transmittance medium is specifically called "electrochemichromic." However, this

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medium is a variable transmittance medium, as it is claimed in the application claimed invention, therefore, the patent claimed invention anticipates the application claimed invention.

9. Claims 76-86, 91-94, 95-97, 99, 100, 106-120, 126 and 140 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 5,523,877. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application claimed invention is an obvious variation of the patent claimed invention. With respect to claim 76 of the application and claim 10, for example, of the patent, the only apparent difference is that the patent recites an electrochromic medium and the application recites a variable transmittance medium. Since the electrochromic medium is a variable transmittance medium, the patent claimed invention anticipates the application claimed invention. For the sake of brevity, only a single claim comparison is provided.

10. Claims 76-80, 84-86, 88, 91-96, 107-109, 115-120 and 140 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 and 12-51 of U.S. Patent No. 5,864,419 in view of Tukude (U.S. Patent 4,702,566).

Though the application claimed invention is not the same as the patent claimed invention, it is an obvious variation of the patent claimed invention. Each of the

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inventions recites optically transparent elements, a variable transmittance medium, such as electrochromic medium, an ultraviolet radiation reducing means, a safety means and near-infrared reflective means, wherein the safety means comprises at least one of a polymer layer, tempered glass panel and a laminated glass assembly. However, the patent claimed invention is silent as to what the ultraviolet radiation reducing means comprises. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an ultraviolet absorber as the ultraviolet radiation reducing means, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. In re Leshin, 125 USPQ 416. Tukude teaches that it has long been known in the electrochromic device art to utilize an ultraviolet absorber as an ultraviolet radiation reducing means. Tukude utilizes the ultraviolet absorber in the transparent display substrate, which is the outer element of the device. Incorporating the ultraviolet absorbing in this element prevents ultraviolet radiation from degrading the internal elements and materials of the device. Therefore, since Tukude clearly teaches that utilizing an ultraviolet absorbing as an ultraviolet radiation reducing means is well known to one of ordinary skill in the art, and it would have known to use it in the patent claimed invention.

11. Claims 76-142, 166, 173, 215, 240, 247, 285, 313 and 320 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-51 of U.S. Patent No. 5,986,797. Although the conflicting claims are not

identical, they are not patentably distinct from each other because the application claimed invention is an obvious variation of the patent claimed invention.

With respect to claim 76 of the application claimed invention and claim 1 of the patent claimed invention, both recite optically transparent elements, a variable transmittance medium, such as electrochromic medium, an ultraviolet radiation reducing means, a safety means, wherein the safety means comprises a polymer layer. The only substantial difference is that the patent claimed invention specifically recites electrochromic medium. However, this is a variable transmittance medium, therefore the patent claimed invention anticipates the application claimed invention. For the sake of brevity, only a single claim comparison is provided.

12. Claims 76-142, 166, 173, 215, 240, 247, 285, 313 and 320 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-39 of U.S. Patent No. 6,122,093. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application claimed invention is an obvious variation of the patent claimed invention.

With respect to claim 76 of the application claimed invention and claim 1 of the patent claimed invention, both recite optically transparent elements, a variable transmittance medium, such as electrochromic medium, an ultraviolet radiation reducing means, a safety means, wherein the safety means comprises a polymer layer. The only substantial difference is that the patent claimed invention specifically recites electrochromic medium. However, this is a variable transmittance medium, therefore the

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patent claimed invention anticipates the application claimed invention. For the sake of brevity, only a single claim comparison is provided.

13. Claims 76-142, 166, 173, 215, 240, 247, 285, 313 and 320 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-32 of U.S. Patent No. 6,304,363. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application claimed invention is an obvious variation of the patent claimed invention.

With respect to claim 76 of the application claimed invention and claim 1 of the patent claimed invention, both recite optically transparent elements, a variable transmittance medium, such as electrochromic medium, an ultraviolet radiation reducing means, a safety means, wherein the safety means comprises a polymer layer. The only substantial difference is that the patent claimed invention specifically recites electrochromic medium. However, this is a variable transmittance medium, therefore the patent claimed invention anticipates the application claimed invention. For the sake of brevity, only a single claim comparison is provided.


### ***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn A. Lester whose telephone number is (703) 308-4943. As of 1-21-04, the new telephone number will be (571) 272-2332. The examiner can normally be reached on M- F, subject to I-flex schedule.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (703) 308-4883. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Evelyn A. Lester  
Primary Examiner  
Art Unit 2873